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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/783,900

02/19/2004

Terry R. Galloway

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EXAMINER

FIORITO, JAMES

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/783,900	Applicant(s) GALLOWAY, TERRY R.	
	Examiner JAMES A. FIORITO	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-21, 23, 24 and 26-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-21, 23-24, and 26-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 19-21, 23-24, and 26-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not disclose the biosensor capable of detecting the presence of bio-agents within 20 min.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19-21, 23-24, and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehman US 20030110946 in view of Rotman US 6872539, Burdine US 20030101700, Galloway US 5292695, and Galloway US 20030022035.

Lehman teaches a system for removing contaminants from the air in a mail sorting room includes a vacuum unit and a filter, both of which may be located within

Art Unit: 1793

this room. The vacuum unit creates a downwardly directed laminar flow of air which expels airborne particulates (e.g., anthrax spores) from the room. Prior to being expelled, the air is passed through a multi-stage filtration unit which includes a HEPA filter and optionally a carbon V.O.C. filter for removing chemical agents. The mail sorting room preferably has a modular construction with removable walls, a ceiling, and a floor. The walls may be transparent or opaque. An air lock room may be attached to the mail sorting room to prevent air from the sorting room from accidentally escaping. A cleaning device may be included in the sorting room for individually cleaning the mail. This cleaning device may be connected to a conveyor which automatically advances the mail for cleaning. The present invention is especially well suited to preventing mail workers from being infected from cross-contaminated letters (Abstract).

Lehman does not expressly state the use of a biosensor.

Rotman teaches a rapid detecting biosensor. It would have been obvious to use Rotman's biosensor in the process of Lehman to identify the presence of bio-agents.

Lehman does not expressly state that the filter is a bed of activated carbon.

Burdine teaches a process similar to Rotman, wherein an activated carbon bed is used as a filter (Paragraph 30).

At the time of invention it would have been obvious to use the activated carbon bed of Burdine as a filter in the process of Lehman.

Lehman does not expressly teach circulating steam and syn-gas from the contaminated filter and into a steam/carbon dioxide reformer.

Galloway '695 teaches a method of reactivating contaminated granular carbon (Column 1 Lines 10-15) by passing steam and syn-gas through the carbon then passing the steam and syn-gas to a steam/carbon dioxide reformer to destroy any of the bio-agents that have been absorbed on the carbon (Claim 1).

At the time of invention it would have been obvious to a person of ordinary skill in the art to form the process of Lehman in view of Burdine to include the steps of passing steam and syn-gas through the activated carbon filter and then passing the syn-gas to a steam/carbon dioxide reformer to destroy any of the bio-agents that have been absorbed on the filter in view of the teaching of Galloway. The suggestion or motivation for doing so would have been to provide a means of cleaning the carbon used in Lehman in view of Burdine.

The process of Lehman in view of Burdine and Galloway '695 does not expressly state reforming at temperatures of at least 1800 degrees F.

Galloway '035 teaches a process of converting a carbonaceous feedstock selected from the group consisting of carbonaceous-containing hazardous waste, carbonaceous-containing medical waste, and mixtures thereof and a greenhouse gas stream in a gasification unit to synthesis gas comprising carbon monoxide and hydrogen, said gasification unit is a non-catalytic high temperature, gas-phase reactor operating at conditions to achieve a gas exit temperature of from at least 700 degrees F to about 1600 degrees F (1300-2900 degrees F) (Claim 1).

At the time of invention it would have been obvious to use the reforming process of Galloway '035 in the process of Lehman in view of Burdine and Galloway '695. The

Art Unit: 1793

suggestion or motivation for doing so would have been to convert carbonaceous feedstocks including bio-agents into energy without the production of unwanted greenhouse gases (Claim 1).

Finally, Lehman does not teach the step of passing the air through a second filter containing a second bed for use while the bed of said filter is undergoing the reactivation operation of step g). However, it is obvious to use a substitute a second filter in a process while the original filter is being cleaned or reactivated in order to minimize the time the process is offline.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES A. FIORITO whose telephone number is (571)272-7426. The examiner can normally be reached on 9am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on (571) 272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James A Fiorito/
Examiner, Art Unit 1793

/Wayne Langel/
Primary Examiner, Art Unit 1793